

BUILDING THE ON-DEMAND WORKFORCE

Companies can transform their talent model—and business strategy—by using digital talent platforms to access highly skilled freelancers.

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Managing the Future of Work



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The authors thank Research Associates Brad DeSanctis and Ria Mazumdar for their support on this report.

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The authors thank Partner Diana Dosik and Associates Sofia Kinney and Victor Fu for their support on this report.

The views expressed in this paper are the sole responsibility of the authors and not meant to represent the views of Harvard Business School, Harvard University, or Boston Consulting Group.

Acknowledgments and disclosures

The authors would like to acknowledge funding support for this project from the Division of Research and Faculty Development at HBS and pro-bono, in-kind support and expertise from BCG.

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Suggested citation: Fuller, J., Raman, M., Bailey A., Vaduganathan N., et al (November 2020). *Building the on-demand workforce*. Published by Harvard Business School and BCG.

Report design: Terberg Design LLC

HARVARD BUSINESS SCHOOL WOULD LIKE TO ACKNOWLEDGE THE SUPPORT OF THE TONY TAMER (MBA 1986) RESEARCH FUND FOR MANAGING THE FUTURE OF WORK.

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Executive summary

The right talent, in the right place, at the right time, is the equation for success in today's world. In an era of technological change, demographic shifts, and economic uncertainty, companies can enhance their ability to compete by building a flexible work model. Their *adaptable approach to talent* can be a dynamic force that improves their competitive strategy.

A few leading companies are rethinking their entire approach to finding and using talent. They are embracing more flexible, blended workforce models, where they can expand or contract their access to specialized, highly skilled workers, as and when needed. The proliferation of digital technology platforms in the last five years has allowed companies to experiment with hiring freelancers, and in the process, create a new “on-demand workforce” model.

These companies have learned from their early pilots and are now moving to the next level: adopting a strategic approach to an on-demand workforce, one that eventually has the potential of even transforming their business models. Covid-19 has only accelerated the move away from traditional, pre-digital-era talent models toward on-demand workforce models.

To understand the transformational potential of the on-demand workforce on the future of organizations—and how they will work—Harvard Business School's Project on Managing the Future of Work and Boston Consulting Group surveyed nearly 700 senior business leaders at U.S. firms. We also conducted in-depth interviews with representatives from the talent platforms themselves and the companies that use them. The goal of the survey and the interviews was to better understand the pervasiveness of and practices around the use of new talent platforms. Our research focused specifically on how companies were using digital talent platforms such as Toptal, Freelancer, InnoCentive, and Upwork to access highly skilled workers—those with at least a four-year college degree or more.

(The research did not include digital platforms such as Uber, Amazon Mechanical Turk, and TaskRabbit, which connect consumers directly to large numbers of service providers.)

Salient findings

As we probed deeper into how companies were accessing highly skilled workers through digital platforms, it became clear that not only was the phenomenon prevalent across all types of functions in companies, but that the deployment of such freelancers was widespread. The work arrangements were both long- and short-term, tactical and strategic, generalized and specialized.

The research revealed a quixotic dichotomy. Most companies were using these digital talent platforms extensively and were aware of their potential to transform the organization, but they were still using digital platforms mainly to fill this or that high-skills gap in a hurry. Very few companies had developed a cohesive approach to incorporate highly skilled freelancers into their business strategy. Only a handful of companies had recently begun exploring the new sources of value as well as avenues for growth that freelancers might unlock for their business. As they confront the possibility of transformation, they ask: How do we fully harness the potential of on-demand, highly skilled workers to improve our competitiveness?

The key takeaways:

- Since 2009, the number of digital talent platforms has grown from 80 to more than 330.
- More than 30% of business leaders reported using new talent platforms extensively, while another 30% reported medium usage.
- Nearly 50% of respondents expected their use of new digital platforms to increase significantly in the future.
- Almost 90% of business leaders reported talent platforms would be somewhat or very important to their organization's future competitive advantage.

- A full 40% of users reported that accessing highly skilled workers through new digital talent platforms helped improve speed to market, boost productivity, and increase innovation.
- Only a handful of companies used new digital talent platforms to improve the performance of current business models and to innovate and create entirely new nimble, talent-light business models of the future.
- Many leaders (60%) reported it was “highly” or “somewhat” possible that their core workforce in the future would be much smaller.
- Similarly, 60% expected they would increasingly prefer to “rent,” “borrow,” or “share” talent with other companies.

Actions and recommendations

As talent platforms proliferate across organizations, they have begun to reveal their true transformative potential because they address two pain points. One, *for companies*, on-demand workforce models allow companies to find top talent for hard-to-fill positions. Two, *for highly skilled workers*, these arrangements allow talent to find a way to stay productive and in the workforce while also managing their work-life priorities. To build a blended, on-demand workforce model, they will need to:

- Remake the culture of the organization, changing the definition of success to focus on attaining outcomes over generating new ideas or managing head count.
- Rethink the employee value proposition, helping employees at all levels understand how they can benefit from arrangements made with new talent platforms.
- Redefine work into discrete components that can be tackled by internal or external contributors.
- Reassess capabilities within the organization in order to tap into underutilized talent.
- Rewire organizational policies and processes, smoothing the path for teams to integrate temporary talent.

The impact of Covid-19

Covid-19 is hastening the transition to on-demand workforce models. As supply and demand gaps for skills have widened, talent issues have put pressure on companies to be smarter about how they utilize their workforce and more creative in how they source the skills they need. Covid-19 has also forced business leaders to build new managerial skills such as leading teams remotely and managing in unpredictable circumstances. Finally, problem-solving in the frantic early Covid-19 months has achieved two unexpected outcomes. One, it untethered companies from the past, forcing them to adapt their traditional ways to survive the crisis. Pre-Covid-19, remote work was viewed with suspicion. Post-Covid-19, it's the norm. Two, it pushed companies faster toward the future in terms of embracing technology. Pre-Covid-19, managers might have been discouraged from working with outsiders, such as highly skilled freelancers, due to procedural issues, such as legal and compliance. Post-Covid-19, companies have stronger muscles for change management and workarounds in a crisis.

As leaders prepare for a new normal and adapt their business models, they know they have an opportunity to think and act boldly. They can put the learnings of the Covid-19 crisis to good use and use freelancers to offset the lack of skills and capabilities that was holding back their ability to grow and compete. By embracing flexibility in whom they hire, internally or externally, they can finally speed up operations and deliver faster on strategy. To survive in a hyper-competitive world, especially post-Covid-19, they must first win the war for talent.

Rise of the high-skills freelancer economy

Well before Covid-19, companies were dealing with a barrage of challenges: increasing automation and digitalization, changing workforce requirements, shifting demographics, and rising competitive pressures. Caught in the crosshairs of a paradigm shift, companies were already grappling with fundamental questions around the future of work. What is essential to the work we do? How can we do it better and faster? How can we find people—especially people who are highly skilled and digitally adept—in the numbers we need, when we need them? And finally, in the face of growing uncertainty, how can we build a more agile, nimble, and flexible organization?

Then came Covid-19.

Countries across the globe battled the pandemic with shutdowns in 2020, and companies scrambled to stay in business. Suddenly, they needed answers to those questions within weeks, hours, even days. Stripped to the basics of survival, it became clear that pre- or post-Covid-19, finding the right talent was going to remain the biggest hurdle to meeting their business objectives.

A pressing need for new capabilities in companies

Over the last two to five years, companies like Amazon, Enel, Royal Dutch Shell, Unilever, and Prudential PLC discovered an innovative, technology-led solution to closing the gap for high-skills talent: digital talent platforms. These early adopters realized that there is plenty of talent to be found—if only they looked for it differently. Instead of hunting for full-time employees to join the organization, they began searching for part-time talent *outside* the company. To do this, they used a new crop of technology-led companies such as Toptal, Catalant, Upwork, and Fiverr that act as intermediaries. Since 2009, the number of digital platforms that offer companies access to *highly skilled workers*—that is, those with a four-year college degree or more—have burgeoned from 80 to more than 330. (See Figure 1.) These talent platforms act as a clearing house to match people—highly skilled, extremely capable, and well experienced—seeking gigs or project work with companies that need their talent—in areas as diverse as marketing, finance, legal, project management, and even innovation and R&D.

As early-adopter companies have become more comfortable with shopping for talent in these digital marketplaces, they have begun moving toward new, more flexible, agile organizations—ones that are built not on

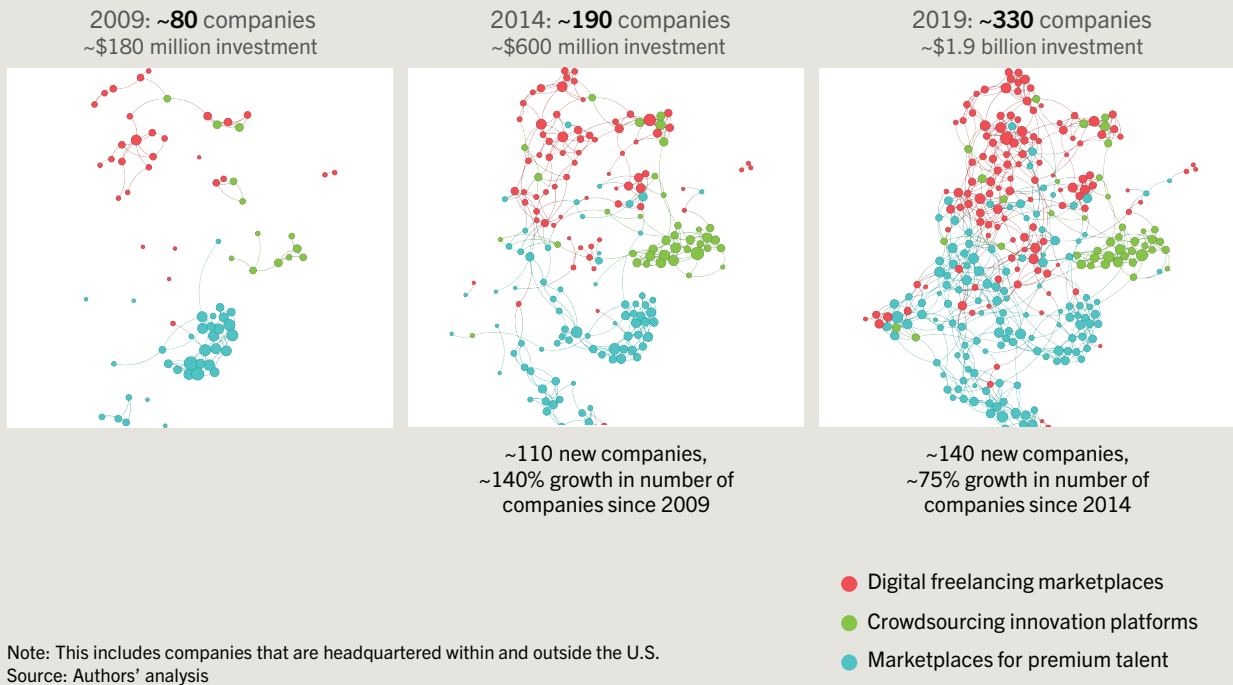
fixed costs and head counts but on a blended mix of full-time and part-time workers: the “on-demand workforce.” Consider the top three reasons companies find it compelling to work with outside talent.

Increased labor-force flexibility: Digital talent platforms allow companies to do more work without increasing their fixed costs. Sometimes that means experimenting before deciding whether a company truly wants to invest in hiring full-time employees with the new capabilities. Other times, it means flexibility in being able to access different capabilities for different needs. For example, when Nestlé wanted to ramp up project development teams at its Silicon Valley Innovation Outpost, it brought on experienced project management support through talent network Braintrust; and when the CIO was tasked with digitizing customer support activities across multiple channels for an infant nutrition brand, he turned to Braintrust to find skilled machine-learning experts who could estimate the scope of the implementation project and build early prototypes. As Nestlé moved further along on its digitalization journey, its Purina brand contracted with six Braintrust freelancers to develop digital experiences for customers. Nestlé managers were looking for flexibility in gaining access to different types of niche expertise—without always going through the cumbersome and more rigid process of hiring talent either as a full-time employee or as an expensive consultant.

A bonus benefit: the deployment of freelancers through digital talent platforms also pushes companies to tap into their own full-time employees’ latest skills. These technologies allow companies to identify underutilized capabilities that hide in plain sight within the organization. Once companies get accustomed to the idea of breaking down work into discrete projects—what Sarah Tang, Vice President of Enterprise at Freelancer, calls the “datafication of work”—there is nothing to stop them from posting projects internally to tap into the hidden or unused aptitude within the company.

Deloitte managers first began using Freelancer Enterprise to find talent skilled in data analytics, research, and design, among other areas. Once using external freelancers became routine, Deloitte managers began wondering if they could use Freelancer’s technology to design and implement an internal talent-sharing platform for full-time employees. The result: Deloitte MyGigs, which now helps the consulting firm match employees to work projects, as and when they arise. MyGigs works well for both the company and its employees. When a special skill or capability is required, Deloitte managers

Figure 1: Growth of the digital talent platform ecosystem



can post their need for it. In turn, employees can “bid” to work on ongoing projects. For employees, it’s a new way to use skills that might not be required in their current full-time role. For example, a consultant who is working in the automotive practice may also have deep skills in user interface and user experience (UI/UX) design from a previous role as a product manager at a technology company. MyGigs allows the consultant to offer the UI/UX skills to whomever urgently needs them across Deloitte.

Accelerated speed to market: Most companies have experienced the chronic pain of not being able to find the right people at the right time, and initially, digital talent platforms helped companies make headway in such cases because they offered the means to speed up processes, meet deliverables, and ensure outcomes in a pinch. Many managers began using ad hoc arrangements with digital talent platforms to deliver results faster, better, and very often more cheaply. Now, over time, these makeshift agreements are getting baked into more routine, deeper engagements.

For multinational alcoholic beverage company Anheuser-Busch InBev (ABI), the need to use digital talent platforms stemmed from an urgency to explore new market

opportunities. The company realized it needed to expand in areas where it had very little in-house expertise—niche customer tastes for craft beer, hard seltzer, canned wine, and even spiked kombucha tea. Instead of wasting time hiring full-time talent with digital analytics skills, ABI turned to Catalant to source individuals with market insights and consumer analytics. The company now uses on-demand experts on a regular basis for functions ranging from project management, business analytics, and corporate strategy to technology, marketing, and accounting.

Last year, when Singapore-based Matt Collier, a senior director at Prudential PLC, was entrusted with reimagining learning for 5,000 insurance agents in Singapore, he found himself grappling with a looming new deadline—to deliver clear, cogent, and compliant training materials within a month or so. When he began going through the training materials, he discovered they were distributed across more than 3,000 PowerPoint slides—all different, all pertinent. Every slide had to be reviewed and synthesized into a larger narrative, and eventually Collier needed a concise, cohesive training presentation. Collier knew he did not have the time to hire anyone, and when he shopped around Prudential for someone with the right skills and excess capacity, few could help him on such

short notice. He went to Toptal to find designers and other talent to create the training materials in time and at a lower cost than any other option. That first successful experiment led Collier to helping other colleagues figure out how they, too, could use Toptal as well as other digital talent platforms.

Innovation through new business models: In an era when fast ideation and execution separates the winners from the also-rans, digital talent platforms offer a way to amplify both innovation intensity and operational efficiency. Early on, Upwork noticed that many of its customers were venture-backed start-ups. These fledgling companies used Upwork freelancers to quickly staff teams to test new products and business models. Now Upwork finds frontline managers in large companies are also using its platform for the same reasons: It's cheaper, faster, and easier to increase the innovation pipeline by tapping into the global talent pool.

When Italian energy company Enel decided to sign on to the United Nations' 2030 Sustainable Development Goals, it knew it would face a challenge to meet the objectives. Managers entrusted with generating new ideas for sustainable innovation contacted several crowdsourcing platforms, including InnoCentive, for help. The logic behind the open innovation approach was simple: In addition to the collective problem-solving power of its 67,000 Enel employees, Enel could tap 400,000 InnoCentive "solvers" worldwide to source good ideas. What started as an effort to generate strategies for transforming into a sustainable energy company resulted in not just meeting the Sustainable Development Goals but also in new recruiting processes to access talent and capabilities. Says Angelo Rigillo, head of innovation governance, intelligence, and partnerships at Enel, "An open approach provides high-quality innovation at low cost. Engineers are happy because they receive many more higher-quality ideas in their innovation funnel from people who are in industries other than the energy industry. Shareholders are happy because we can continue innovating at a dramatically lower cost than we were spending on entirely internal innovation. That's why, after the crowdsourcing test, three years ago, we launched our own crowdsourcing platform, www.openinnovability.com." By mid-2020, Enel had collected more than 5,000 ideas from more than 100 countries, unlocking millions of euros in value.

Earlier this year, Enel's open innovation ecosystem became an invaluable tool for addressing disruptions to business continuity that were caused by Covid-19. In parts of South America, for instance, Enel customers accustomed to paying bills in cash could no longer do so due to social distancing, nor were they able to pay online

because of a lack of infrastructure for online payments. Local managers posted a challenge to crowdsource ideas for solving the bill-payment issue. Within days, solutions started pouring in to fix the problem. By August 2020, Enel had received more than 600 proposals aimed at improving resiliency and mitigating the negative effects of the pandemic; the company has already implemented more than one in five of the suggestions.

Growth of high-skills digital talent marketplaces

What is gig work? Even up to a couple of years ago, the word would be associated with ride-hailing platforms like Uber and Lyft, platforms that provide access to home-repair services like Thumbtack, or moving services like Bellhop. These platforms connect *consumers* with local service providers such as plumbers, contractors, caregivers, delivery persons, or drivers with a car. A much more silent but equally swift surge has taken place for high-skills work, where *companies* can connect with marketing specialists, scientists, lawyers, designers, editors, and even C-suite talent such as CHROs, CFOs, and CEOs—all looking for part-time, project-based engagements.

Today, there is not just a proliferation of digital talent platforms of all types, there is growing specialization and sophistication within categories. Even within the more cognitive, high-skills type of work (see the top-right quadrant of Figure 2), digital talent platforms currently cluster into three categories:

Marketplaces for premium talent: These platforms, which include Toptal, TalMix, and Braintrust, allow companies to source niche experts, including legal translators, financial modelers, and big-data analysts. Experts can be hired for project work or embedded in project teams. The project assignments can range in length from a few hours to more than a year. Toptal claims it represents the "top 3%" of freelancers from around the globe with hard-to-find capabilities, such as software engineers, UI/UX designers, project managers and scrum masters, financial modelers, and even interim CEOs.

Digital freelancing marketplaces: Platforms like Upwork and 99designs match individuals with companies for discrete, task-oriented projects—for instance, designing a logo or writing a project proposal. They offer access to workers from around the globe with a wide variety of skills, and payment is often based on per completed task. When Amazon needed to explore whether to expand into custom social-media content for new TV shows, it tested the waters with Tongal, a platform for accessing freelancers with media skills. Instead

Figure 2: The growing differentiation within high-skills and cognitive digital talent platforms

Labor value added	High	Renovation and remodel <i>(HomeAdvisor)</i> Skilled trades <i>(TradeCrews)</i> Craftsmanship <i>(Thumbtack)</i>	Data analytics <i>(Toptal)</i> Strategic planning <i>(Catalant)</i> Web development <i>(Upwork)</i> Media production <i>(Fiverr)</i>
	Low	Ride-hailing <i>(Uber)</i> Cleaning <i>(Handy)</i> Moving <i>(Bellhop)</i>	Data entry <i>(DAivergent)</i> Transcription <i>(Rev)</i> Document processing <i>(Amazon Mechanical Turk)</i>
		Physical	Cognitive
		Type of work	

Note: The types of work in each quadrant are examples and are not exhaustive.

of investing in an in-house team or contracting to a traditional media agency, Amazon used Tongal to quickly “fail fast” and learn exactly what kind of capabilities it would require to expand into developing social-media content.

Crowdsourcing innovation platforms: Crowdsourcing platforms such as InnoCentive and Kaggle allow companies to post problems and challenges to their websites. They reach large user communities with sophisticated technical skills, and thus they tap into a worldwide pool of experts to generate solutions. Problems range from simple coding tasks to complex engineering puzzles. These digital innovation platforms allow immediate exposure to a web of external experts with highly specific skills. Often, they offer prizes as a reward for winning solutions. Enel now uses crowdsourcing platforms to generate ideas for a host of issues, including how to improve recruiting, how to identify and alleviate cybersecurity risks, and what to do with thermal plant sites no longer in use. InnoCentive’s pharmaceutical clients use the platform to get instant access to more researchers than they could ever afford to have on their payroll. For example, AstraZeneca used InnoCentive “solvers” to develop a retrievable device to deliver oligonucleotides (DNA or RNA molecules used in research and testing). Roche, after struggling to find a better way to measure a

clinical specimen in its internal R&D, used external InnoCentive talent to develop a solution.¹ In both cases, the companies were able to widen the funnel of innovation without burdening themselves with expensive fixed costs. Enel now uses crowdsourcing platforms to generate ideas for a host of issues that require specialists, such as finding smart-city solutions, detecting archaeological finds, recycling wind-turbine glass wool, and developing cross-effective charging stations for electric vehicles.

Shift to a strategic approach to on-demand workforces

Companies are now moving beyond early experiments. They have learned through these efforts what works as well as what doesn’t. Many now realize that, instead of engaging with platforms as an ad hoc response to an urgent problem, there are far greater benefits to developing an integrated strategy—one that uses these digital technology platforms not just to tap the best talent outside their company but also to get the most out of the latent capabilities of their full-time employees. Increasingly, companies are asking, if these digital marketplaces work well for the organization from outside the organization, how much more value would they deliver if they were embedded at the core of its competitive strategy? Done

well, it's an answer that companies suspect will not only change the way they think about talent, it can actually transform their very business model.

Digital talent platforms sense growing interest in their clients to move from one-off engagements handled by frontline managers to strategy discussions with senior management. They are reacting by expanding the services they offer and building a slew of capabilities. Consider Catalant Technologies, which started out in 2013 as HourlyNerd. Initially, HourlyNerd connected small and midsize businesses with MBA candidates with a background in management consulting. By 2016, HourlyNerd had outgrown its original premise. The company was rebranded Catalant Technologies, providing enterprise offerings to Global 500 companies.

Similarly, other firms have evolved to meet their clients' demands. In 2016, Upwork launched Upwork Enterprise, which was designed to make it easier for enterprise clients to access talent. In 2017, Freelancer launched its own enterprise business. Upwork and Freelancer now offer a marketplace for premium talent as well as digital talent. Meanwhile, Freelancer has also expanded into the crowdsourcing market.

The growing demand from companies has spurred the development of new business models. Representing another innovation in the field, Braintrust was launched as a new model of a digital freelancer platform in 2018. Braintrust is organized as a nonprofit and controlled by voting allocated to its freelancers and contributors through blockchain tokens. In an effort to better align the incentives, Braintrust allows freelancers to post what they would like to be paid on its platform. Companies using the platform hire freelancers based on the bid amount as well as pay Braintrust 10% of the bid amount as a fee. Everyone shares a common, transparent understanding of the cost of using freelance talent.

In the initial years, most companies used these platforms on an ad hoc basis. They did not develop a strategic relationship with the platforms. Instead, individual managers engaged talent platforms as and when needed. Even when usage of a digital talent platform increased widely across the company, each engagement would be negotiated as a one-off transaction. Companies just did not treat these talent platforms as they would a traditional vendor that is important for their business model.

Over the last two to three years, there was a shift underway. By 2020, most of the leading talent platforms were already exploring products or partnerships to help them pitch directly to the C-suite at the strategy level. During the Covid-19 pandemic, with rising demand for help from their existing Fortune 500 customers, these talent platforms are scrambling to offer more value-added services that are more closely aligned to a strategic approach to talent management. In April, Catalant launched a new software-as-a-service (SaaS) platform called Catalant Core Platform. In May, Toptal self-published an e-book, *The Sudden Remote Playbook*, drawing from its decade-long experience in helping clients handle work remotely. Post-Covid-19, these talent platforms are gearing up to play a more significant role in closing the skills gap. In the new normal, they expect to match many more companies requiring hard-to-find skills to many more freelancers looking for flexible working arrangements.

The on-demand workforce: The transition imperative

Between December 2019 and January 2020, we surveyed 700 U.S. business leaders in companies with revenues greater than \$100 million. (See Appendix for methodology.) The goal was to understand what companies were experiencing in terms of the changing nature of work—as well as the use of digital platforms to deal with the paradigm shift. Not surprisingly, a majority of business leaders reported that they were being buffeted by a number of “strong” or “extremely strong” forces simultaneously. Many were factors linked to the surge in technology and automation within the organization, but many were also based on factors outside the organization, such as shifting demographics or changing worker attitudes. (See Figure 3.)

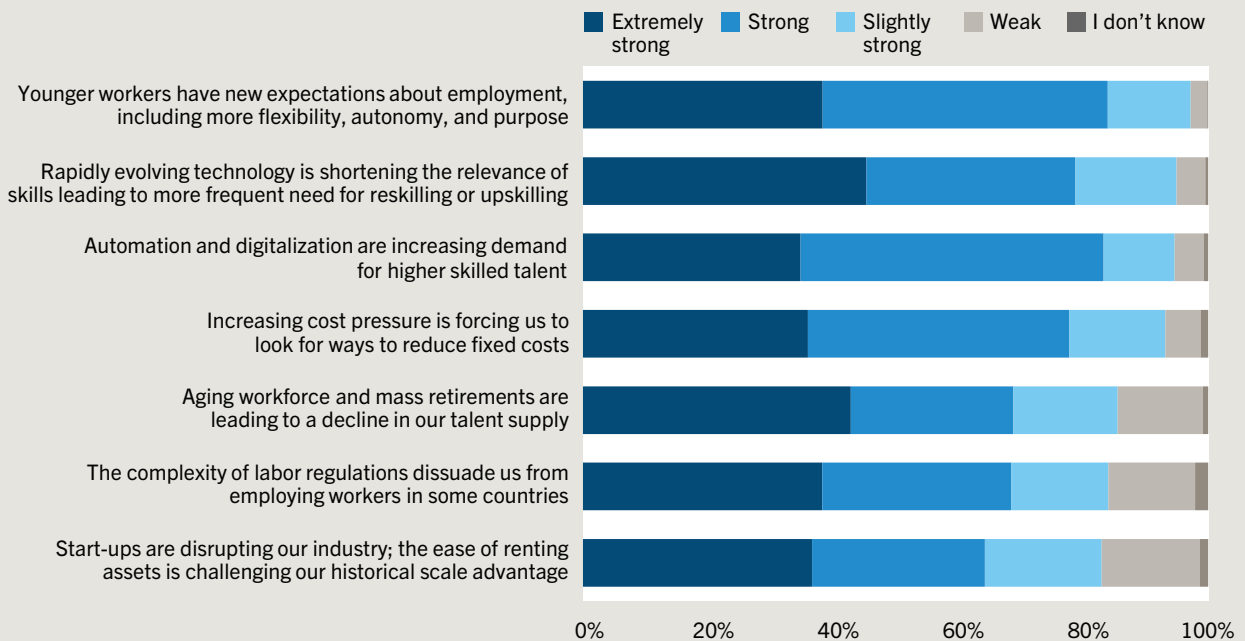
Rapid technological change

The massive gains in computing power, the rapid spread of connectivity, innovations in software engineering, and scaled computing through the cloud have shifted more and more business activities into the digital and algorithmic world. Companies have been undergoing digital transformations, introducing new technologies and restructuring their organizational charts to ensure

that their costs and service offerings are competitive. By one estimate, companies spent more than \$1 trillion on digital transformations globally in 2019 and are on pace to surpass \$2.3 trillion by 2023.² We first reported on the multiple forces of change impacting the future of work in our report *Future Positive* (BCG–HBS Project on Managing the Future of Work, May 2019), with 79% of business leaders surveyed saying the future of work in their companies was “strongly” or “very strongly” impacted by rapidly evolving technology.

This recent survey went into deeper detail on one key aspect of the impact of technology: the rise of digital talent platforms and their ability to connect companies with highly skilled gig or part-time workers. The survey results, along with company interviews and secondary research, drew a stark picture of how much companies were struggling to find the right talent in a timely fashion under the relentless onslaught of new technologies. As many as 83% of business leaders reported automation and digitalization put “strong” or “extremely strong” pressure on their organizations to find skilled talent. (See Figure 3.) When asked to list the most important drivers of success in the near future, business leaders prioritized

Figure 3: Multiple forces reshaping the future of work



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform.

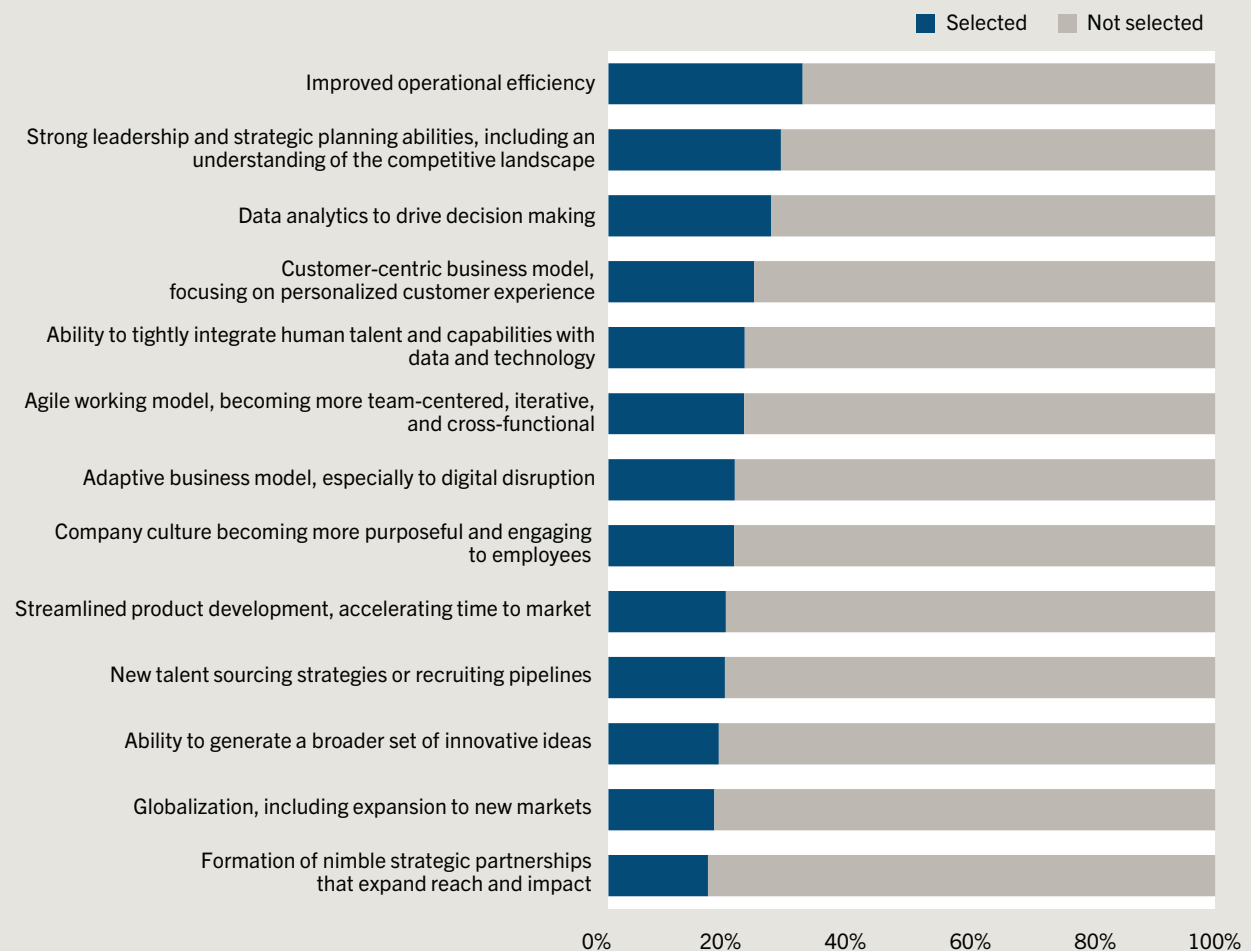
Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

improved operational efficiency, strong leadership and strategic planning abilities, data-driven decision making, and personalized customer experiences. (See Figure 4.)

Delivering against all these business-model goals requires more and more technology—which then puts pressure to find the right talent, fast. For instance, as artificial intelligence has become increasingly central to revenue growth and operations improvements, firms must scramble to access the data-scientists pool. To attract such talent, firms often compete on wages and location with technology behemoths like Google, Amazon, and Netflix. Companies are also struggling to hire people with capabilities to create social-media content and deliver digitally enabled consumer experiences with apps and other digital tools.

Competitive pressures like these are forcing many companies onto unfamiliar ground, pushing them to look for a greater range of talent sources than ever before. When asked about their companies' priorities over the past three years, business leaders consistently confirmed an organizational focus on building the digital skills necessary for technological change and building a culture of "lifelong learning" to encourage employees to develop skills that will be critical to future success. (See Figure 5.) While companies understand the need to prepare for these challenges, they wonder how they will go from their current traditional approaches to a better, more efficient way to access talent and capabilities quickly.

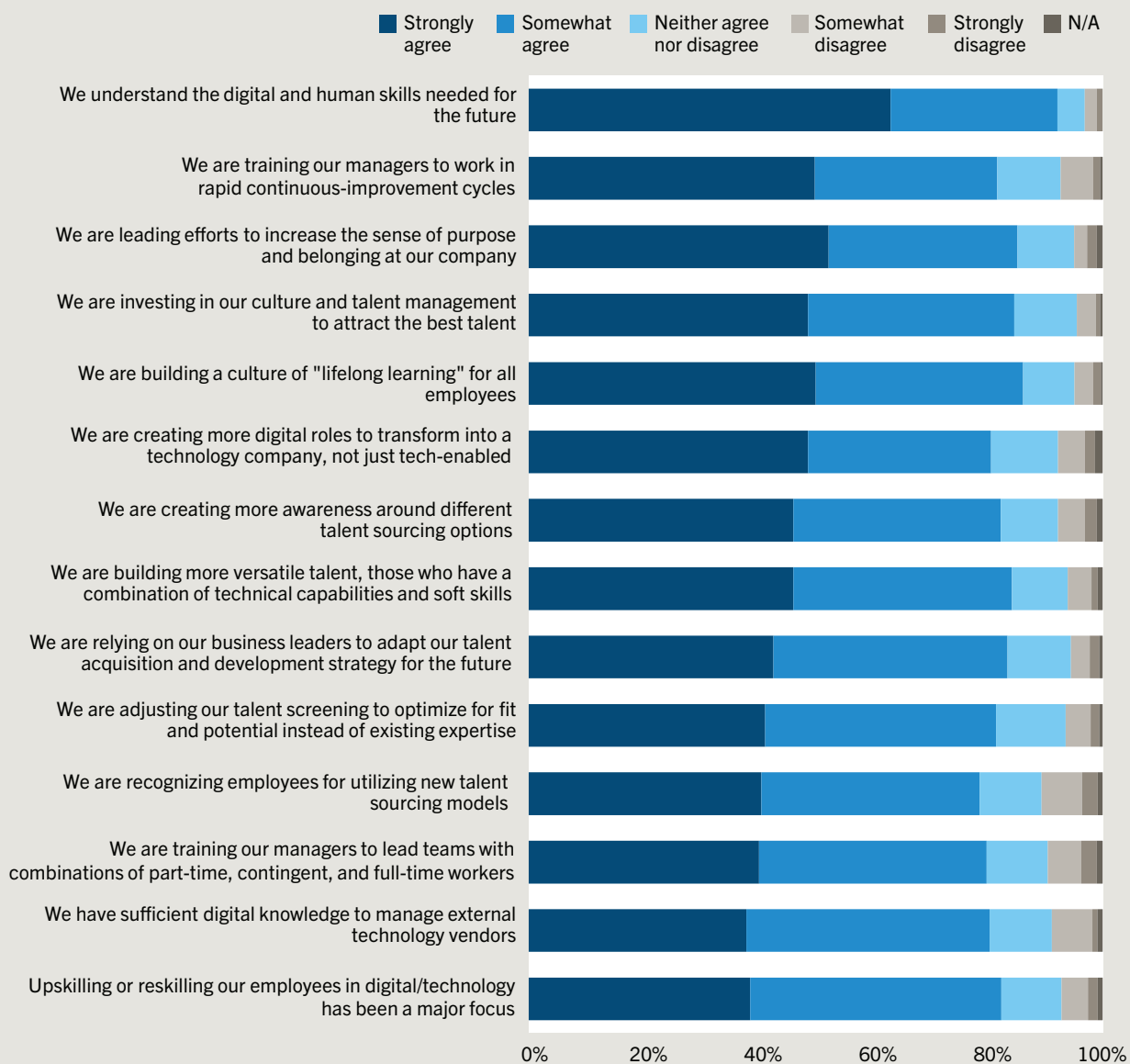
Figure 4: Business leaders' top three drivers of success in the near future



Note: The question was shown to business leaders who indicated they were "moderately" or "extremely" familiar with the area of sourcing talent/talent strategy and "aware" of at least one type of digital talent platform. The results above exclude the choice of "Other," which was selected by 0% of respondents.

Source: "The On-Demand Workforce Survey," Harvard Business School's Project on Managing the Future of Work and BCG's People & Organization practice, November 2019 to January 2020

Figure 5: Approaches to prepare for a new future of work



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform.

Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

Significant shifts in talent pools

The demographic challenges facing today’s companies are widely documented. By 2034, in the U.S., those over the age of 65 will outnumber children for the first time in history.³ Many industries are struggling with mass retirements and the rapid aging of their workforce. Sixty-nine percent of our survey respondents noted they had been “strongly” or “extremely strongly” affected by these challenges.

Many of the demographic changes are adding to the care burdens of American workers. By one estimate, 47% of middle-aged Americans were sandwiched in families that included elderly parents as well as dependent children.⁴ A January 2019 report, *The Caring Company*, from the HBS Project on Managing the Future of Work found that 82% of employees with care responsibilities felt an effect on their productivity, and in a statistic worrisome to most employers, as high as 32% of surveyed employees had left a job because of their care responsibilities.⁵

Increasingly, people are struggling to balance work while continuing to deal with family obligations. While women in the U.S. receive master's and doctoral degrees at a higher rate than men, they still disproportionately take on family-care obligations, which prevents them from participating in the workforce.⁶ The rise of single-parent households is adding to the burden for men and women to stay in the workforce, and once again, women bear a larger share of the responsibility: In 2018, 23% of children were living with a single mother, up from 8% in 1960.^{7,8} For many such female and male caregivers, the advent of digital talent platforms is a boon. By becoming a member of the on-demand workforce, they can fashion workdays or work periods such that they can meet both home and work obligations. Their skills and capabilities do not have to go to waste. Estimates of the number of freelancers currently in the U.S. economy already range from about 20 million—or about 12% of the workforce—to 57 million—or more than a third of the workforce.⁹

The geography of talent is also causing a scarcity in many areas outside of popular urban hubs. High-skills talent has historically been concentrated in regions such as Silicon Valley, Boston, and New York. Companies located outside those regions have generally struggled to find the talent they need. The crunch is worse for companies that are not traditionally considered to be preferred employers in the technology space—for instance, a consumer products company or an automobile manufacturer. Many younger workers also want their efforts to show meaningful outcomes, rather than feel that they are part of a process that adds up to a distant whole. Our 2019 report *Future Positive* found that 66% of U.S. business leaders anticipated that employee expectations for meaningful work would be “somewhat significant” or “very significant.” The same research found that 65% of surveyed workers in the U.S. expected more flexible work arrangements, autonomy, and purpose in the future.¹⁰

The influence of Covid-19

With the onset of Covid-19, we conducted extensive interviews with digital talent platforms as well as companies using these platforms between April 2020 and October 2020. We discovered that, post-Covid-19, both the supply of highly skilled freelancers and the need for on-demand talent was surging. The reasons were not hard to discern.

On the supply side, many workers are now exploring the opportunity offered by digital platforms. For example, employees who were suddenly laid off have begun looking for work online. Talent platforms provide a means for highly skilled workers in full-time jobs who are

struggling to balance remote work with care responsibilities and are looking for flexible work alternatives. There are also examples of people whose skills are in high demand—such as teachers and tutors—who are adding freelance work to their full-time jobs. A survey of more than 6,000 working-age adults in the U.S. conducted by Upwork in June–July 2020 captured the surge. The report *Freelance Forward* notes that, based on survey results, 12% of the U.S. workforce turned to freelancing for the first time during Covid-19. Of these new freelancers, 60% said there is no amount of money that would convince them to take a traditional job, and nearly 50% already saw freelancing as a long-term career opportunity. Many who took up freelancing did so for caregiving reasons. Says Hayden Brown, CEO of Upwork, “It’s no surprise that freelancing is on the rise, especially now that we have fully disentangled ‘where’ we work from ‘what’ we work on.” As of September 2020, Upwork estimates 59 million Americans performed freelance work in the past 12 months, representing 36% of the U.S. workforce, an increase of 2 million freelancers since 2019.

On the demand side, companies have been forced to conduct business remotely, which has necessitated bringing in new technology to manage operations and deliver services to customers. That, in turn, has sped up the process of blending full-time and independent professionals either to reduce costs or to close urgent skills gaps. Catalant reported a nearly 260% increase in demand for supply-chain expertise after the onset of the pandemic. Similarly, Upwork’s client registration surged by 50% in the wake of Covid-19 shutdowns. The company saw clients clamor for specialized skills, such as digital marketing expertise, as companies shifted to more online marketing. It was a similar story at Freelancer. According to Sarah Tang, Vice President of Enterprise at Freelancer: “By June 2020, we saw a 53% increase in new paying hiring managers, compared to June 2019. We also saw a 25% increase in user signups—mainly freelancers. We expect a permanent step change due to Covid-19.”

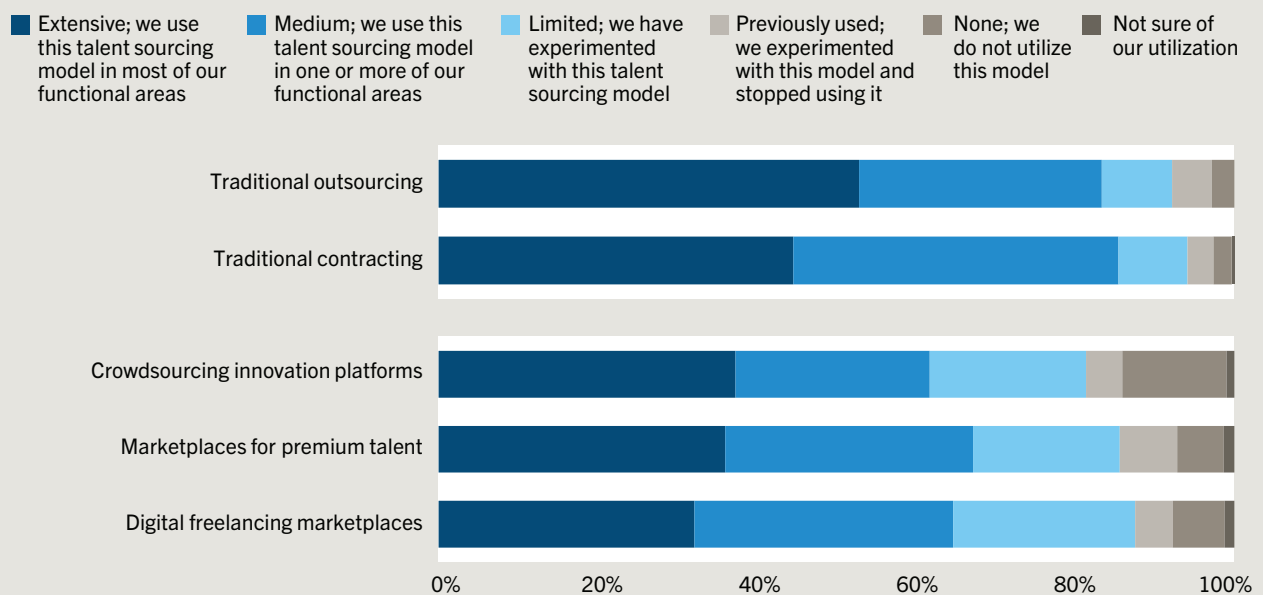
The on-demand workforce: The transformation challenge

The opportunistic ad hoc use of digital talent platforms has increased substantially over the last few years. It has not only spread widely across companies of all sizes and in all industries, it has percolated deep into all types of functions within companies. However, our survey results and discussions with companies show that many companies are yet to harness the full potential of high-skills talent accessed through digital talent platforms. While early adopters have begun to recognize the strategic potential, only a few leading companies have embarked on transforming their talent strategy. Consider how companies are grappling with the transition to new blended, on-demand workforce models.

Extensive ad hoc use of highly skilled freelancers

The survey showed that companies are making extensive use of digital talent platforms, and expect to continue to do so. More than 30% of business leaders reported that their organization uses the three types of talent platforms extensively, while another 30%, on average, reported medium usage. (See Figure 6.) An overwhelming majority of respondents believed that usage of digital talent platforms in their company had increased in the previous three years, with many reporting a significant increase in usage. (See Figure 7 on page 14.)

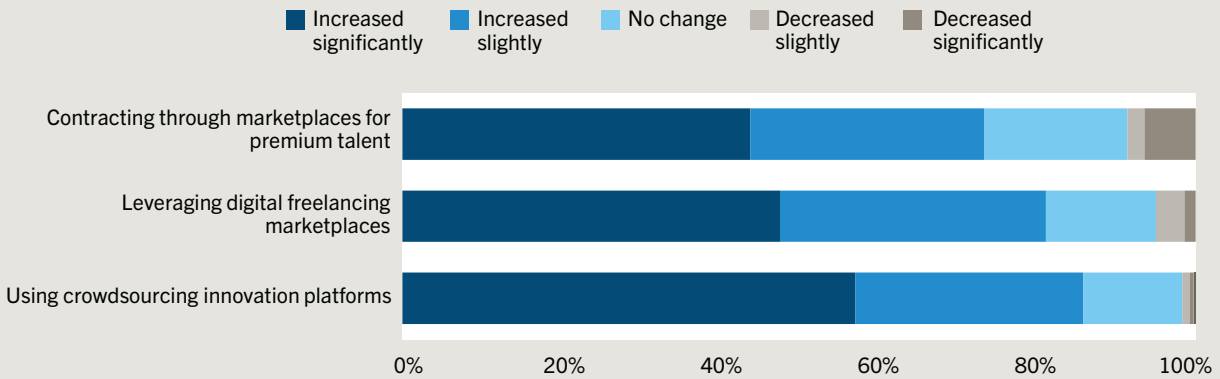
Figure 6: Increasing adoption of variety of high-skills digital talent platforms



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform.

Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

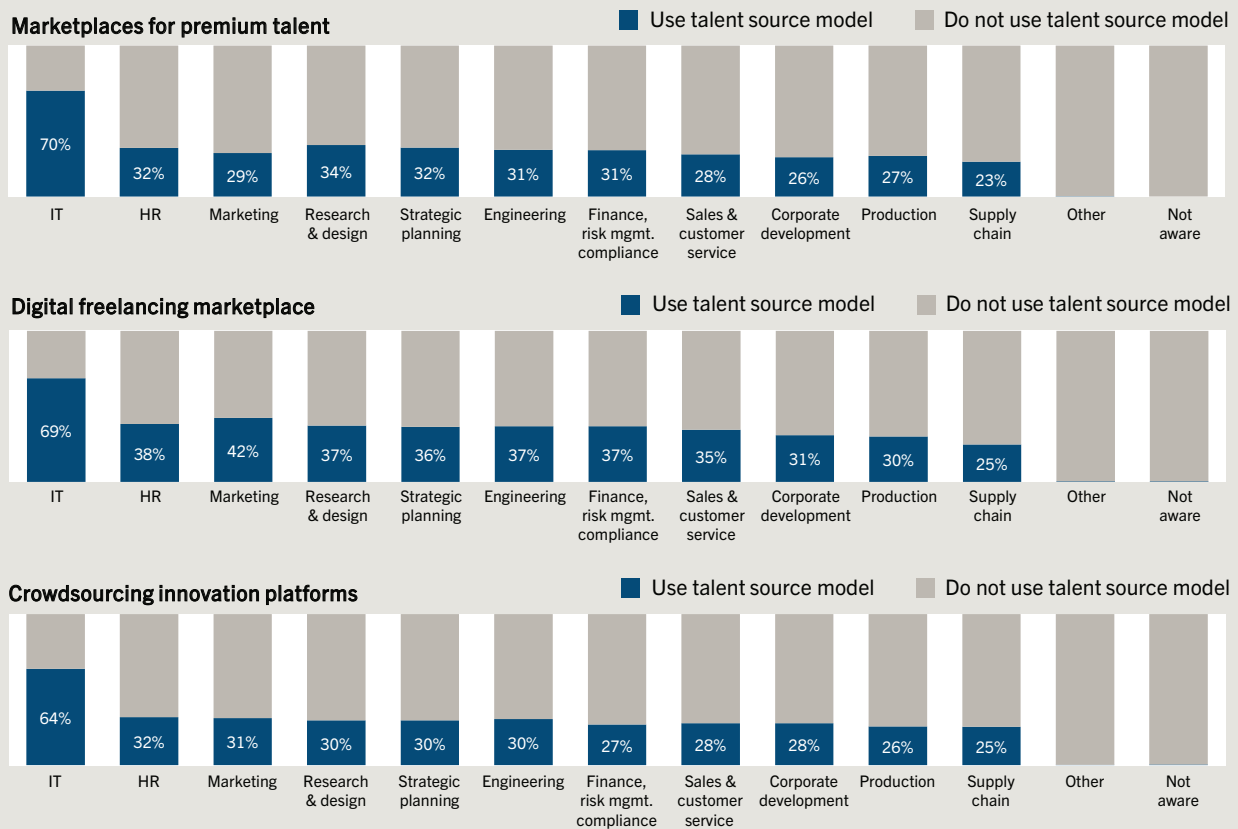
Figure 7: Increased utilization of talent platforms to access high-skills talent



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform.

Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

Figure 8: Widespread use of digital talent platforms across functions



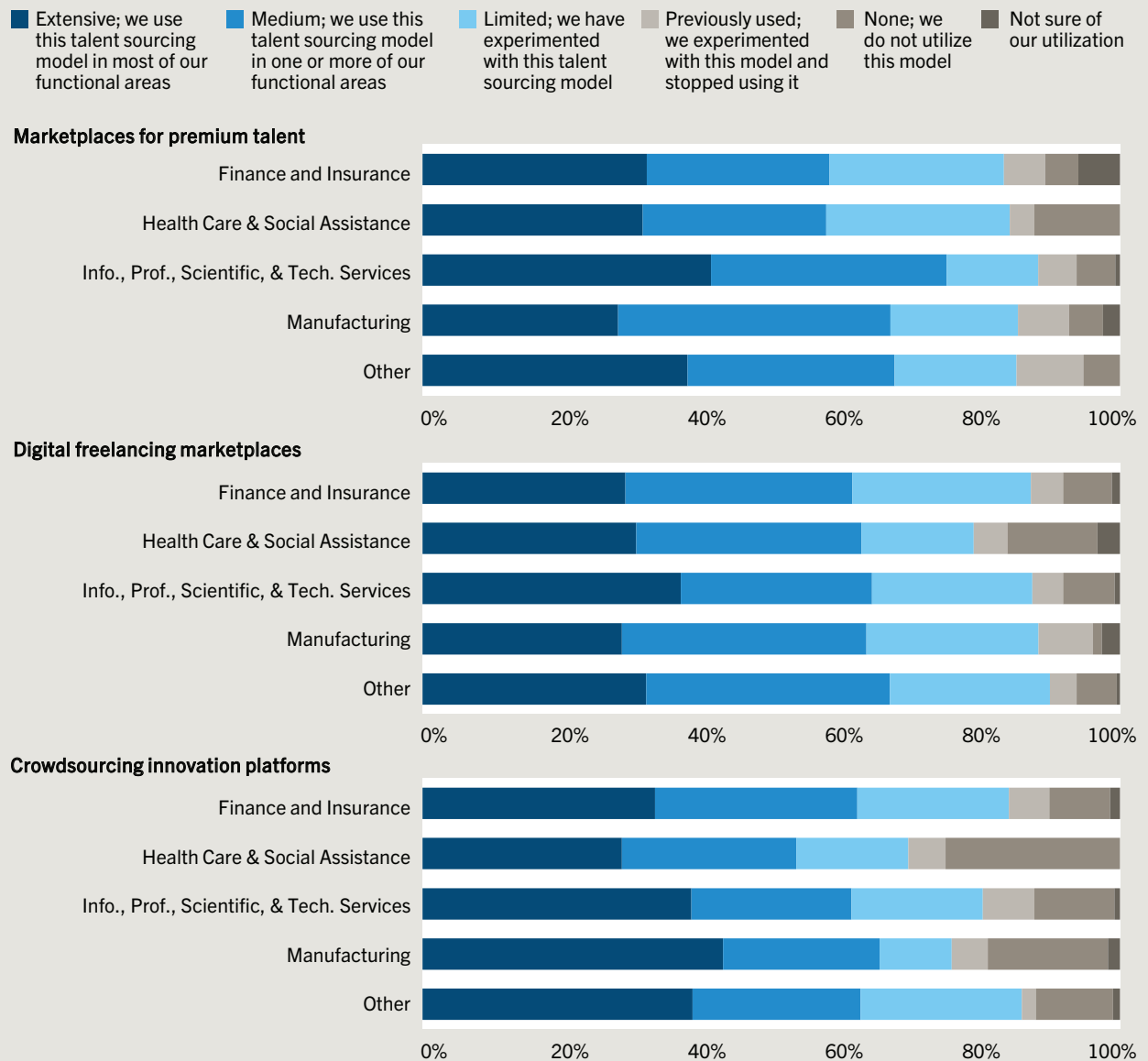
Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform.

Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

The survey also revealed that companies were using digital talent platforms broadly across functions and sectors, to find the right talent and get work done. (See Figure 8 and Figure 9.) Contrary to notions that use of talent platforms is most concentrated in a few areas such as IT, the survey showed that companies were tapping highly skilled freelancers for all functions in the organization including R&D, marketing, strategic planning, and finance; and for both high- and low-complexity work.

Only one in 10 users reported using platforms only for low-complexity work. High usage also held across many sectors (finance, professional services, IT, manufacturing, health care), with more than 50% of respondents reporting “medium” or “extensive” usage in all sectors.

Figure 9: Proliferation of digital talent platforms across industries



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform.

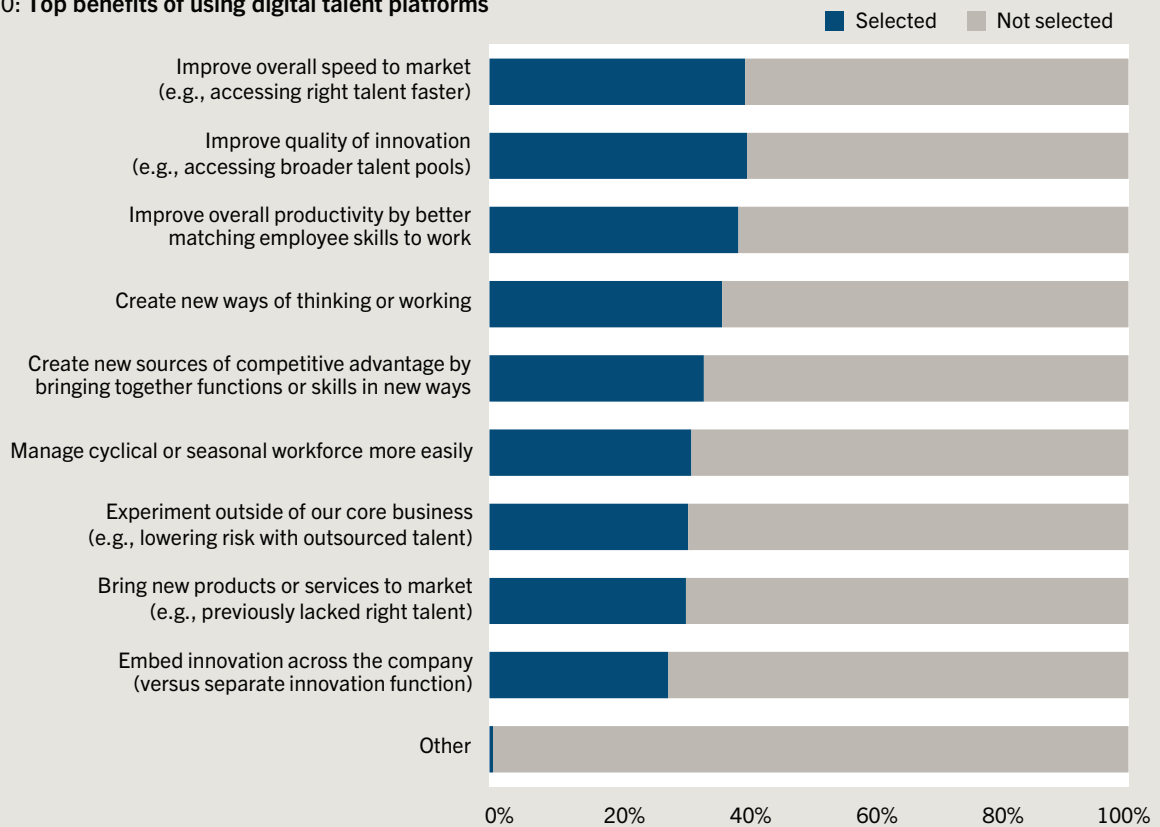
Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

Recognition of strategic potential of on-demand talent models

The survey revealed that companies have seen the value of incorporating highly skilled freelancers into their core processes. When asked what value they get from platforms, more than 40% of business leaders reported that using new talent platforms helped the organization hasten speed to market, boost productivity, and increase innovation. (See Figure 10.) Almost 90% of business leaders believed that the talent platforms would be somewhat or very important to their organization’s future competitive advantage. (See Figure 11.)

It doesn’t stop there. The survey showed that, increasingly, companies expect to use new talent models not just to improve performance within the confines of their current business models but also to experiment with new business models built around using an on-demand workforce. Certainly, a majority of C-suite leaders shared that vision for a future that relies on new talent models. Nearly 50% believed that their use of digital talent platforms would increase significantly in the future. (See Figure 12.) Six in 10 respondents reported that it was “highly” or “somewhat” possible that their full-time workforce in the future would be much smaller. Additionally, 60% expect they would increasingly prefer to “rent,” “borrow,” or “share” talent with other companies. (See Figure 13 on page 18.)

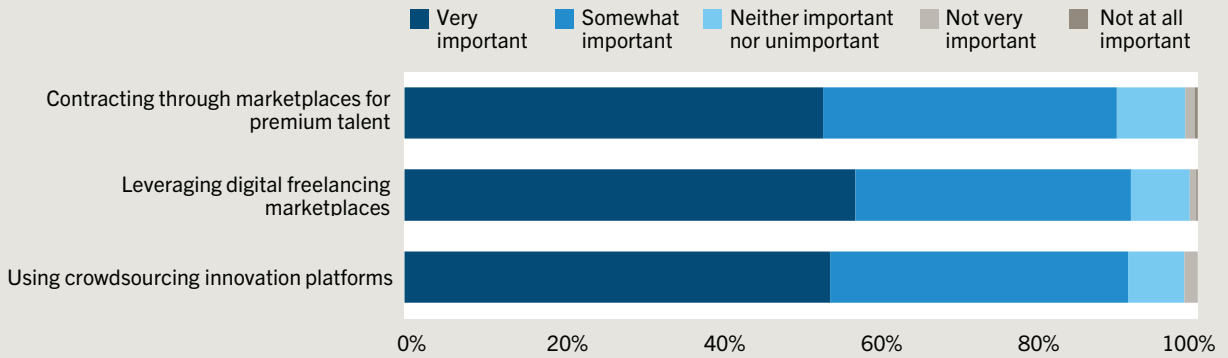
Figure 10: Top benefits of using digital talent platforms



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform. Respondents could select more than one answer.

Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

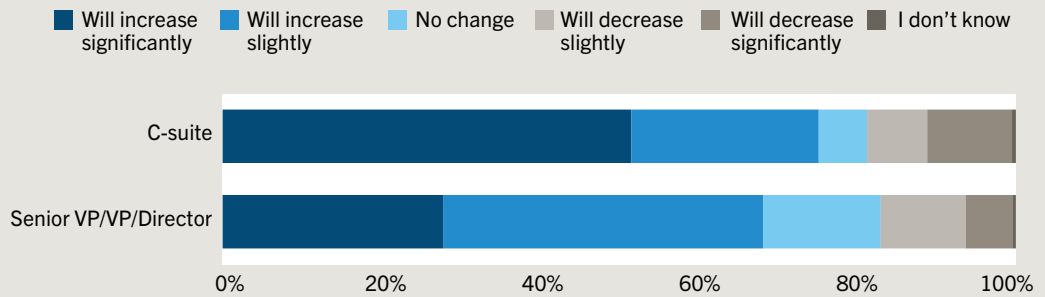
Figure 11: Growing importance of digital talent platforms in building competitive advantage



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform.

Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

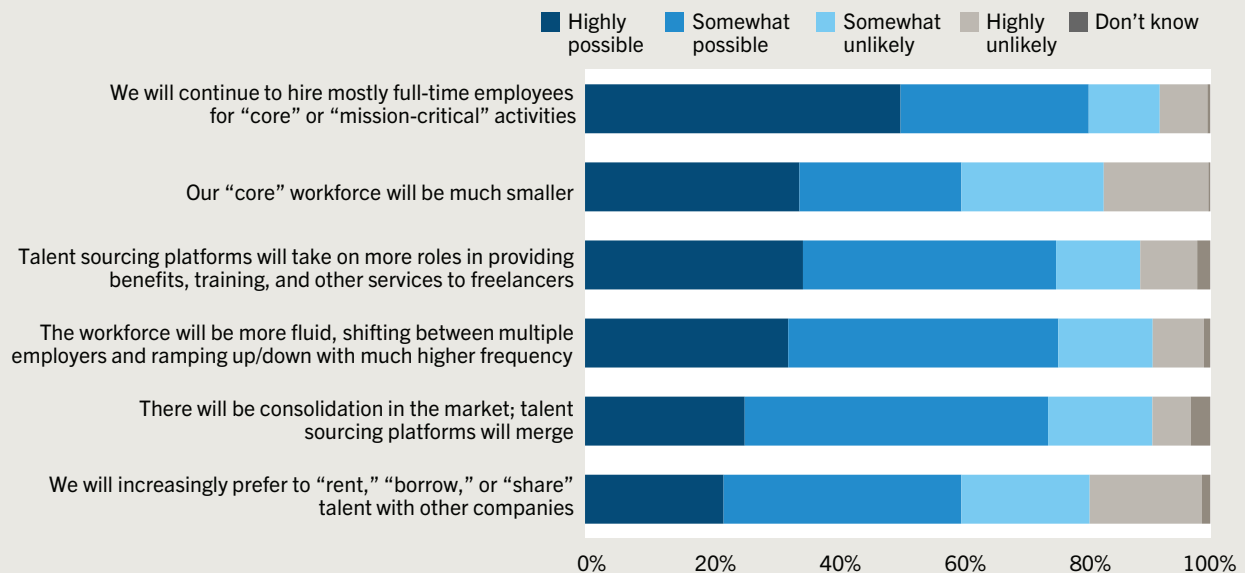
Figure 12: Expected evolution in utilization of talent models over the next three years



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform.

Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

Figure 13: Beliefs of how workforce and talent sourcing will change in future



Note: The question was shown to business leaders who indicated they were "moderately" or "extremely" familiar with the area of sourcing talent/talent strategy and "aware" of at least one type of digital talent platform.

Source: "The On-Demand Workforce Survey," Harvard Business School's Project on Managing the Future of Work and BCG's People & Organization practice, November 2019 to January 2020

Lack of alignment in management

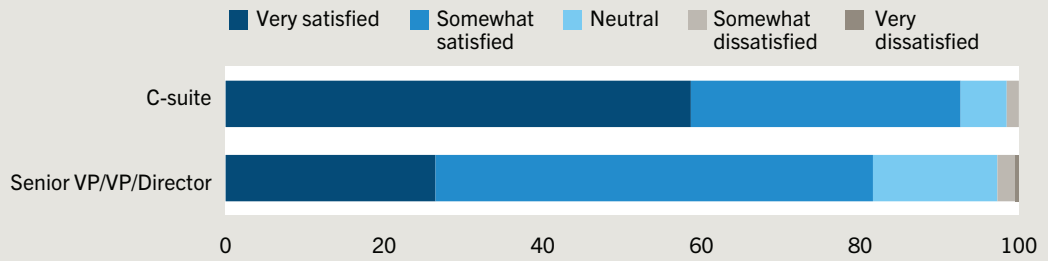
The survey showed that the C-suite is largely out of step with frontline managers on acknowledging the effectiveness of their organization's use of the on-demand workforce. While CEOs tended to have a rosy opinion of their organization's use of talent platforms, upper management was less optimistic about their power to transform the business: About 59% of CEOs were "very satisfied" with models, compared with 26% of the next level of senior management. (See Figure 14.) While 60% of CEOs claimed these digital talent platforms were "very important" to future competitive advantage, less than 40% of senior management agreed. Meanwhile, as stated earlier, CEOs were nearly twice as likely to report that use of new talent models would "increase significantly."

Human resources leaders were even more out of sync on the use of on-demand talent. Nearly a third of dissatisfied users complained that HR struggled to integrate these models into the organization. The survey showed clearly that human resources departments were only doing what they were tasked to do: hire, evaluate, and compensate employees within the jobs, laws, and company systems as they are currently defined. In conversations with

companies where on-demand workforces were being blended in more successfully, we sometimes heard that it was despite HR, rather than because of traditional HR.

The tension is palpable. (See Figure 15.) C-suite leaders and senior managers shared a common view that their organizations would primarily rely on full-time workers. However, as the survey explored attitudes toward greater utilization of on-demand talent to get work done, the views of the C-suite and senior managers diverged, sometimes widely. While C-suite leaders remained focused on the long-term utility and benefits of digital talent platforms—such as reducing costs or increasing speed to market or increasing flexibility—managers tempered their enthusiasm. Their attitudes reflected a more realistic understanding of the very real struggle of giving up decades-old traditions and processes of how work is done, which is part of the transition to adopting new talent models. Those on the front lines of experiencing the change saw the looming challenges in implementation. They were already struggling with tricky questions: What is work? Who does the work? How are people compensated for the work? Who gets the credit for the work?

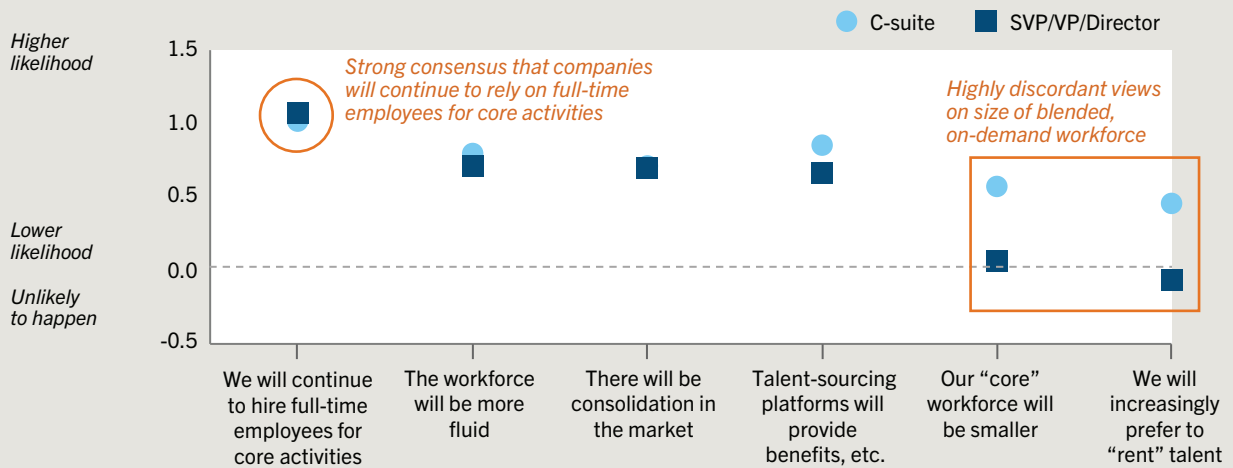
Figure 14: C-suite leaders are more optimistic than frontline managers about talent platforms



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform. Level of satisfaction pertained to a particular type of digital talent platform. For respondents who provided their level of satisfaction to more than one type of digital talent platform, an average level of satisfaction was calculated.

Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

Figure 15: Differences in perceptions between strategy leaders versus implementers



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform.

Respondents were asked to rate the likelihood of each statement. A net score was then calculated by averaging a numerical score for each response: “Highly possible” = 2, “Somewhat possible” = 1, “Somewhat unlikely” = -1, “Highly unlikely” = -2, “I don’t know” = 0.

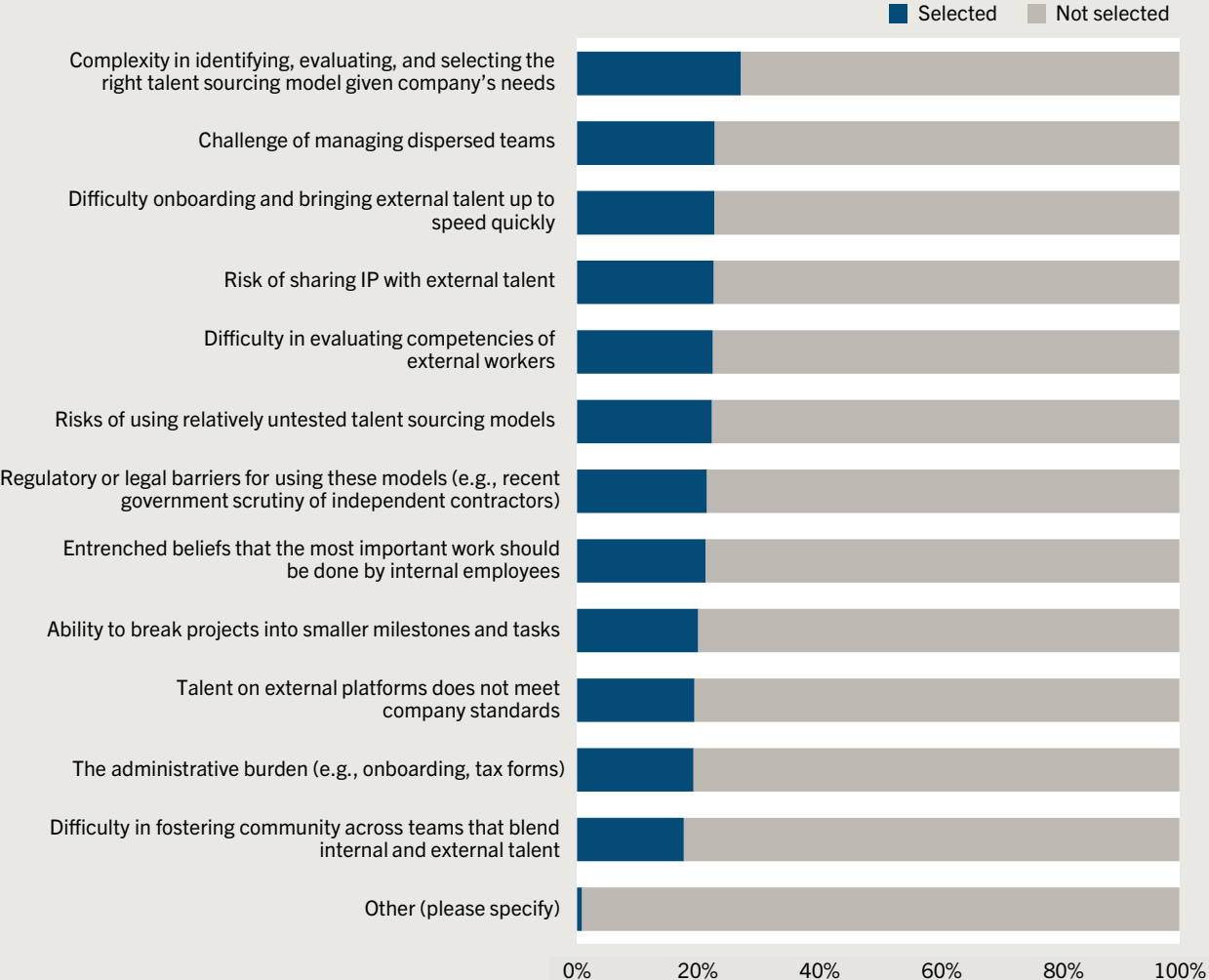
Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

Building the on-demand workforce: A strategic approach

The survey revealed the contrast among different levels of management on how fast companies should move ahead on blending their workforces to include highly skilled freelancers. Leaders were aware that, while the benefits were many, breaking from the strong ties of the past would not be easy. Responding to survey questions pre-Covid-19, they listed the barriers they perceived their organizations would need to overcome. (See Figure 16.) Clearly, in the future, each organization will need to set the pace based on what best suits its culture, workforce, business model, and competitive strategy.

Covid-19 shows signs of bringing down some of these barriers. Post-Covid-19, there has been an acceleration in the supply of highly skilled freelancers offering their services through digital talent platforms. On the flip side, in order to survive shutdowns, companies have swiftly changed policies and procedures—with the help and support of internal full-time employees—to do things differently. This includes a surge in demand for external high-skills talent during Covid-19. Further, key attitudes as to how work is done—such as remote work—have suddenly undergone a swift, irreversible change. As companies emerge into a new normal, many will discover

Figure 16: Barriers perceived in leveraging new talent platforms



Note: The question was shown to business leaders who indicated they were “moderately” or “extremely” familiar with the area of sourcing talent/talent strategy and “aware” of at least one type of digital talent platform.

Source: “The On-Demand Workforce Survey,” Harvard Business School’s Project on Managing the Future of Work and BCG’s People & Organization practice, November 2019 to January 2020

a greater appetite for blended workforces, if it is deemed critical for the company's survival in the future. While the speed at which companies choose to embark on their journey will vary, most will need to tackle five strategic transitions.

Redefining the culture of the organization

When NASA first began using crowdsourcing platforms to get more innovative ideas, its engineers were up in arms. The resistance was not hard to understand. Those working full time for NASA saw it as a fundamental shift in the way NASA approached its core activity: innovation. Employees felt insecure about how their roles would change and whether they would have a future in this new environment. For many engineers, it went beyond job security to the core of who they were: If outsiders were now going to bring ideas to NASA, what would happen to their identity and sense of worth? Says one employee of his colleagues, "They are not used to going out and saying 'Hey. We have a problem, and we don't know how to do it. Can you guys do it?' [For] these guys, *it's all they do*. . . They make flight hardware. And they make the best ones. *That's what they do*."¹¹

At Enel, too, the shift to sourcing innovation from outside the organization required careful handling. The resistance came not just from the rank and file but also from senior leaders who worried about the impact on the image of the company: Did relying on people from outside the company signal that people inside the company were not good enough? Of the surveyed business leaders, one in five reported having to battle the assumption that full-time employees must do all the core, or strategic, work. Organizations will need to dispel these notions to fully reap the benefits of digital talent platforms.

According to Ernesto Ciorra, Chief Innovation Officer at Enel, it took time for manager to understand and accept the benefits of tapping external talent. Says Ciorra, "We had to become more humble and share our challenges with those outside the company. People thought I was crazy for sharing a strategic challenge externally, but we realized we needed to share our needs, dreams, nightmares. The best ideas lay outside the company." Rachel Suarez, the Director of Employer Brand and Talent Channel Transformation at Unilever expressed a similar sentiment, saying, "We needed a big mindset shift within the reorganization, led by inspiring senior leaders. Full-time employees are not the only way to get work done. You don't need to have every skill inside the company; you can tap into them outside as well."¹²

At a very fundamental level, using talent platforms goes against how full-time employees are taught to think about

work. A person becomes a part of an organization, builds networks, manages a career, builds allies—in other words, people work with other people they know and trust. When a highly skilled external worker enters the equation, internal employees are suddenly being asked to trust a total stranger. At GE, when the company first tried using talent sourced through talent platforms, it found that people resisted posting projects online. When asked what was causing their resistance, Balakarthikeyan Nagarajan, Executive Director, Employee Experience and People Analytics, GE noted, "The number one reason was that people are more comfortable with talent they are familiar with. So for important projects, they want to pick someone from their extended teams, instead of someone picking their project on a platform."

Historically, resistance to remote working arrangements has prevented companies from accessing the on-demand workforce, though the Covid-19 crisis has substantially mitigated this challenge. Already in the first few months of 2020, social distancing has forced organizations to move up the curve. Taso Du Val, CEO of Toptal, recalled how challenging it was for employees to become comfortable with project-based work to tap freelance talent online. "It was hard to convince companies that remote talent works, and that creating a robust remote work environment is possible—even to the extent that it can be more efficient, more effective, than an in-office working environment. Now, post-Covid-19, this is significantly easier." Upwork CEO Hayden Brown agreed, saying, "One of the biggest impediments we faced from clients in the past was that our workforce was remote. This pandemic has shown potential customers that remote work is not so difficult."

Rethinking the employee value proposition

As talent platforms penetrate organizations, they have already begun to reveal the paradigm shift that is underway. Companies embracing the future of work in a digital era find they have to set aside rigid, historical practices for managing work developed in the industrial era. Most companies are reluctant to embrace the need for change, since it has implications for the way they structure themselves, populate their organization, manage people, and most importantly, deliver value to customers and shareholders.

To unlock the potential of freelancers, companies must deliberately train their existing talent to facilitate the transfer of work to and from individuals external to the organization. To make the most of the on-demand workforce, full-time employees must act as enablers. They must learn how to ask the right questions, define

the scope of discrete pieces of work for external partners, and provide external freelancers access to relevant institutional knowledge.

Our research found that many employees become vexed by the challenges involved in making this shift. A quarter of business leaders surveyed who used talent platforms noted that assessing competencies of external talent was a barrier to adoption, and one in five complained of the difficulty of breaking projects into smaller milestones and tasks or articulating the exact skills needed for a given job. When Enel introduced its open innovation ecosystem, managers quickly realized that to be successful they first needed to clearly articulate their business challenges. Once they learned to communicate the business challenge such that people outside the company could understand it, they began to unleash a powerful stream of innovative ideas from external talent.

Both full-time and gig employees must also learn to work productively with widely dispersed teams. In order to maximize the value provided by freelancers, teams must become adept at working with a revolving set of colleagues, building the habit of explicitly verbalizing formerly implicit team norms and making progress more transparent for others to track against.

Companies should audit incentives, ensuring managers are rewarded for making effective use of freelance resources. This requires replacing data compensation systems that associate rewards with the number of full-time employees supervised. For example, Royal Dutch Shell determined on the fly how to align employee incentives with their platform strategy. The company had to quickly determine how employees would be evaluated through existing policies. Shell's HR system included an Individual Development Plan and a Goals and Performance Appraisal. Caroline Missen, Business Advisor to the Downstream Director, described the quandary. "We saw we were getting into challenging HR territory with line managers not being the best equipped to do the appraisal and to determine the performance factor and associated bonus. In discussions with HR, we felt that it was easier to have employees use the platform as a way to address their development—for instance, developing a new skill or leveraging a skill they already have."¹³

Companies must also help employees understand how they can benefit from arrangements made with talent platforms. That's the plan that one private equity firm adopted when it rolled out its plan to collaborate with Upwork. According to Hayden Brown, Upwork's CEO, the message that the company sent to its employees was, "This is a way to help you. [...] There are a lot of things that you may be doing in your day-to-day work that you

can [delegate, so that you can] do even higher-order work, or free yourself up to do more strategic thinking."

While the challenge is daunting, leaders should take heart: An unexpected ally in this change process might well be highly skilled internal employees who want to be a part of the paradigm shift—a trend spurred by the many demographic factors changing worker preferences. Across age groups, full-time employees want more flexibility themselves. They want to be able to choose whether they work full time or part time and whether they want employer-provided benefits or prefer to choose benefits and providers on their own. Post-Covid-19, those attitude shifts are expected to accelerate. Often, one reason why full-time employees enjoy working on blended teams is because freelancers improve their quality of work. If the more routine or non-essential tasks are carried out by freelancers, full-time employees are able to work on more interesting and meaningful work that motivates them. Increasingly, therefore, companies may find that employees are keen to support changes that are good for the company's wellbeing as well as their own. An organization that learns to accommodate external talent must also be attuned to the interests and ambitions of its internal talent.

Restructuring work into components

The ability to break work down into rigid, discrete components is one of the biggest predictors of whether a company will get the best out of a blended workforce model. In a typical organization, it can be hard to hand off tasks cleanly. Managers and employees have considerable shared knowledge. They are able to follow up with clarifications and course corrections as the project progresses. Water-cooler conversations and random hallway encounters, as everyone knows, can often be useful for keeping work moving. In such a traditional structure, tasks can be vague when initially assigned, and there will still be enough interaction to let specifics evolve over time. In contrast, when working with freelance talent, ambiguity and shifting goals quickly escalate costs and reduce effectiveness.

This need to divide and delineate work can be quite daunting if large parts of the organization are to migrate to project-based work. In fact, 20% of those who use digital talent platforms reported that they struggled to set more finite milestones and to break projects into smaller, more discrete tasks. Unilever educated its senior leaders on reconstructing workflows to enable the use of talent platforms. When Enel adopted its open innovation approach, it quickly learned that, to be effective, it first had to train employees how to ask the right questions. That requires training employees to pose questions with

the right level of clarity and detail so that they resulted in more effective outcomes. Says Enel's Ciorra, "You can't just ask, 'I need something useful for my renewable energy problem.' Instead, you have to be specific: 'I need to reduce the usage of X when I do Y in Z context.'" Raquel Suarez, Unilever's global employer brand and talent channels director, agrees. "In many cases, leaders were not prepared to redefine their workflow in a way that allowed short-term freelancers to jump in, do the task, and move on," she says.¹⁴

Managers at Shell traversed a similar learning curve. Shell's Caroline Missen says, "There are all types of managers who struggle to articulate what it is they really want someone to do. It is often quite vague. They just know they need some bodies to do things." Helen Dawson, who was responsible for strategy work on the future of Shell's Lubricants Supply Chain, agreed that this was a significant challenge. "It takes a conscious effort to design your allocation of work to use the platform," she says.¹⁵

For companies that have embarked on agile transformations, the process of change has already begun. These companies have already shifted to a project-based work paradigm and begun to train their employees to think in terms of projects connected to end results. Apportioning projects to external freelancers is more straightforward when work is broken up this way and when managers are accustomed to articulating work with precise project descriptions.

Reassessing the capabilities within the organization

The best strategy for managing digital talent platforms entails developing a portfolio of the talents and skills required by the organization. The first step is to identify the talent a company has and the capabilities it will need in the future in order to come up with the correct blend of in-house and outsourced talent.

Unilever adopted Degreed, an education technology platform that allows internal employees to certify their expertise with "microcredentials" aligned with specific skills.¹⁶ Using this type of system allows employees to be recognized for their skills, provides clear roadmaps of which skills employees can develop to be considered for advancement, and, critically, allows executives to determine which skills are present in their organization and who possesses them.

For Shell, the wake-up call came when Amazon launched its own branded lubricant oil. Facing a threat to its commoditized business from a disruptor outside the

industry, Shell had to rethink how it wanted to raise revenues in the future. One key strategy for reaching its goal of \$2.5 billion in net earnings for its "Global Commercial" enterprise business by 2025 was to generate new revenue opportunities by accelerating digital and services growth. Shell recognized that this move would create an urgent need for digital talent, and that it would take too long to find and hire the digital natives it required. So, instead, Shell worked to identify which untapped digital skills it already had in its organization by creating a cloud-based platform called Opportunity Hub.¹⁷

Managers who needed people with specific skills could post projects as Opportunity Owners. Employees from across the organization could apply to work on the project as Opportunity Seekers. The key digital skills that the company trawled for included robotics, digital demand forecasting, digital communications, online aggregators, and artificial intelligence and machine learning. Scott Rappaport, an innovation manager at Shell found he was suddenly able to access all kinds of digital skills within the company. When he posted six- to eight-week-long projects, he was pleasantly surprised by the quality of Opportunity Seekers who responded. "They were from parts of the organization where I did not know anybody, so this platform scaled way beyond any formal or informal network I could have imagined having in Shell. It also cut through a lot of the vertical approaches to traditional resourcing. The people who responded actually had capabilities in that space that they weren't leveraging in their existing roles."¹⁸

Rewiring organizational policies and processes

Most companies have a set of policies and procedures designed to ensure work is completed efficiently and with appropriate attention to risks. Established processes allow employees to do their work while ensuring that, for instance, regulations are adhered to, legal issues are avoided, intellectual property is protected, and cybersecurity is ensured. Our research found that these structures commonly create roadblocks to using the on-demand workforce. Indeed, the way that companies are designed to interact with vendors involves isolating them in an attempt to carefully control each aspect of the interaction. It is unsurprising that structures designed to keep external entities at arm's length can pose problems for integrating outside talent sourced from digital platforms. In fact, one in five respondents who used talent through digital platforms noted that engaging with them created administrative burdens. The solution: slowly adapting policies and procedures as comfort grows around the use of external freelancers. When Matt Collier

first tried to bring in Toptal to overhaul and upgrade the training materials at Prudential, he had to go through a series of procedural processes that were standard for all external vendors: due diligence, intellectual property protection, and technology risk evaluation. As the benefit of working with Toptal became clear, Prudential shifted to a master service agreement with Toptal to allow for repeated engagements. Suddenly, it became much easier for any manager at Prudential to swiftly bring in the skilled talent they needed at short notice. But getting to that level of comfort took time.

Embracing digital talent platforms is disruptive because, while companies are still subject to legislation and policies from a pre-digital era, they now have to find workarounds to some very fundamental issues. Making matters more complex, laws about who is counted as a full-time employee vary widely across jurisdictions. Companies must be sure they are compliant with employment laws where they, and the individuals with whom they are contracting, are based. When using a digital talent platform, a company could be working with a freelancer who lives in a different state, or even a different country.

Managers at Unilever saw the downside of clashing systems and expectations. Like many large organizations, Unilever had a method for paying suppliers and external contractors—typically involving multiple departments over the course of weeks. On-demand workers, however, are accustomed to being paid more quickly, usually by a credit card on the platform. This presented challenges for managers. Once this misalignment was explained to senior leaders, they were able to work across silos to speed up payment cycles while keeping track of, “Who we paid, what we were paying for, what was the quality of the work, and whether the rates offered were competitive,” according to Adfer Muzaffar, a former Senior Manager for Talent and Learning at Unilever.¹⁹

Challenges from a lack of organization-wide alignment extend beyond mismatched payment cycles. In fact,

about one in four survey respondents reported that regulatory or legal questions or intellectual property risks presented roadblocks to using an on-demand talent platform. When Microsoft initially engaged with Upwork, it realized early that to truly gain the benefits of external freelance talent, it would first need to change internally—especially in terms of collaboration across different parts of Microsoft. The company established an internal program to assist managers in navigating the challenges of accessing freelance services. Microsoft ensured that it involved representatives from HR, legal, and procurement to create systems and processes that would streamline engagements with freelancers and promote secure and compliant use. By preemptively taking action, Microsoft paved the way for Upwork’s talent platform to integrate into Microsoft work flows more smoothly and efficiently.

Building the on-demand workforce: An action agenda

As executives explore the strategic value of these digital talent platforms, many should first look at how their company is using talent models today, recognizing that different parts of their organizations are using freelance talent with different levels of sophistication. After understanding where their organizations are on the maturity curve (whether managers are using new talent models predominantly to address short-term talent gaps or to revolutionize their approach to addressing core business needs) executives can take action to lead firm-wide change to capture ever more value from the on-demand workforce. (See Figure 17.)

Deploying micro-experiments

For many companies, ad hoc experiments are already running successfully, and the building blocks of culture change are already in place. Management can kick-start a more strategic approach by highlighting the benefits of external highly skilled workers and sharing with full-time employees the successes and challenges of working with digital talent platforms. Micro-experiments can thus become stepping stones to building confidence in the value of a blended workforce model for senior management and frontline managers as well as for full-time employees.

Running sample cases also allows organizations to hone in on which models work best in which context. Rather than relying on a single approach, companies can adopt a

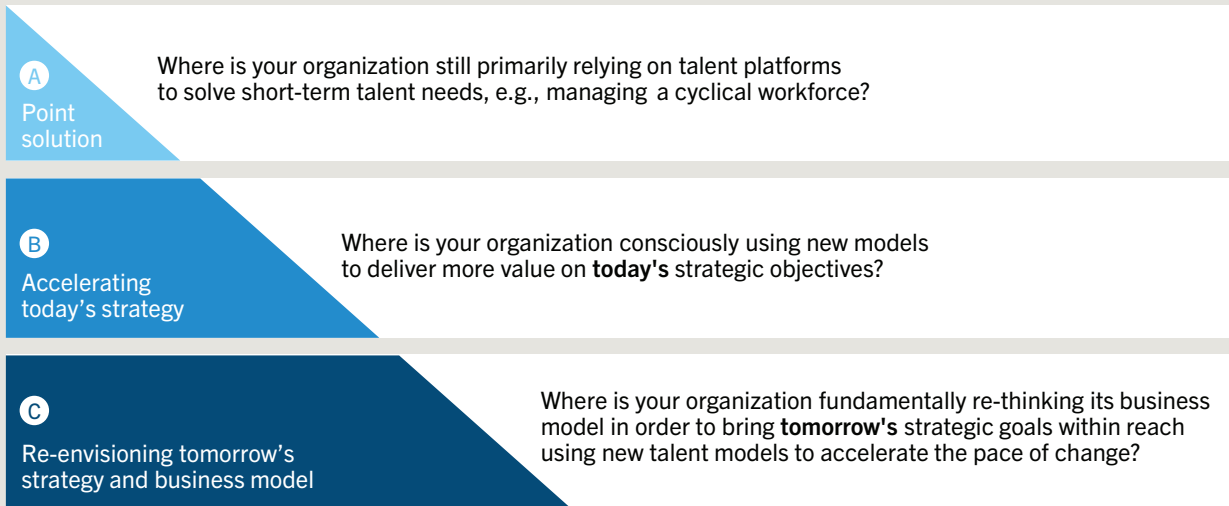
portfolio of examples and talent platform types. Unilever took this approach. Not wanting to commit the entire firm to a single arrangement, it began by experimenting with more than 50 pilots across the organization—including online marketplaces for premium talent, digital free-lancing marketplaces, crowdsourcing innovation platforms, and internal talent platforms, before determining which provided the most strategic value.²⁰

Identifying the champions of change

Once leaders have taken stock of their current use of digital talent platforms, they should start to forecast their optimal future use, sometimes using a “zero-based talent-stack” thought experiment, asking questions like: What is the minimum set of activities that should be conducted by full-time employees within the organization? Which tasks or business objectives could benefit from being performed by external or part-time employees (for example, those that gain by aggregating input from a broader set of stakeholders, those that benefit by being siloed from the main business, or those that only temporarily require cutting-edge expertise)?

Clearly, the new approaches to talent cannot be simply bolted onto outdated ways of working, or be used to outsource what was previously done in-house. Instead, they work best when there is an openness to their potential. For example, the transformative value of artificial intelligence did not come from applying AI to existing

Figure 17: The maturing of the on-demand workforce model



data processes. Instead, it required a re-evaluation of the processes themselves to determine the new sources of value AI could unlock for a company's business model.

Given the re-envisioning required, it helps if the process is led by senior C-suite leaders. Currently, sophisticated companies are being very careful to find the right leader to lay out the strategic path to a blended, on-demand workforce of the future. Some companies depend on their Chief Technology Officer, others on the Chief Marketing Officer or even the Chief Financial Officer, still others on the Chief Human Resources Officer. To be successful, the change requires a leader who models the new capabilities required of all employees—a leader with the ability to recognize and shed the constraining dogmas of the past and the eagerness and creativity to embrace the possibilities of the future.

The journey onward

Emerging digital talent platforms are making it possible for companies to mold their workforce in real time to respond to changing market needs. On-demand, highly skilled workers allow companies to tap into skills they don't have internally and broaden their capabilities—which, in turn, rapidly improve the company's ability to efficiently and effectively complete critical projects.

Covid-19 has accelerated a number of latent trends that were gradually shaping the future of work. Competitiveness in the future will hinge on having access to world-class talent when needed. Accessing that much-sought-after talent will require the development of new skills in human resources and project management. It will require moving away from practices designed in an era when companies relied on full-time employees to get work done and when they had no access to digital talent platforms. Functions will have to re-engineer core

processes to reflect a new operating reality. Incumbent workers will have to set aside comfortable practices and learn new skills.

Companies will find those costs worth bearing when they realize how on-demand freelance talent can be essential to their continued viability. To harness the full potential of an on-demand workforce, companies will need to embrace the disruption of digital talent platforms, just as they would reorganize while adopting any important new technology.

Maximizing the effective use of talent platforms will also help companies enhance their ability to retain their own talent. By using these platforms, companies can deploy their most-skilled talent to projects of the greatest importance. They can match full-time employees to work that they find most exciting and motivating.

Done right, the disruptive power of digital talent platforms can also unleash new business models as organizations adapt to evolving customer needs. But first, it requires rethinking talent as a strategic issue rather than an HR issue.

Appendix: Survey methodology

To understand the rise of the on-demand workforce due to the proliferation of digital talent platforms, Harvard Business School’s Project on Managing the Future of Work and BCG conducted a survey of U.S. business leaders who were “moderately” or “extremely” familiar with using at least one of the three types of talent-sourcing platforms: crowdsourcing, freelance marketplaces, and on-demand premium talent.

The survey focused on senior decision makers in firms with revenues greater than \$100 million. The 673 respondents represented levels including and above vice president and director. A subset of industries were

oversampled to conduct industry-specific analysis. These included: health care; professional, scientific and technical services; finance and insurance; and manufacturing.

Third-party research firm Dynata fielded the survey using an online panel methodology. The survey was conducted before Covid-19, between November 2019 and January 2020.

Title

CEO/President/Owner/Managing Director	269	40%
CFO/Chief Treasurer/Chief Controller	50	7%
CIO/Technology Director	60	9%
CMO	4	1%
COO	9	1%
CHRO	11	2%
Other board member	0	0%
Other C-level executive or equivalent	17	3%
Senior VP/VP/Director	253	38%
TOTAL	673	100%*

Employees

1–49	1	0%
50–99	7	1%
100–499	52	8%
500–999	84	12%
1,000–2,499	104	15%
2,500–4,999	124	18%
5,000–9,999	158	23%
10,000+	143	21%
TOTAL	673	100%*

*Percentages do not add up to 100% due to rounding.

Industry

Agriculture, Forestry, Fishing, and Hunting	3	0%
Mining	2	0%
Utilities	14	2%
Construction	53	8%
Manufacturing	91	14%
Wholesale Trade	15	2%
Retail Trade	41	6%
Transportation and Warehousing	15	2%
Information	60	9%
Finance and Insurance	98	15%
Real Estate Rental and Leasing	13	2%
Professional, Scientific, and Technical Services	97	14%
Administrative and Support and Waste Management and Remediation Services	5	1%
Educational Services	60	9%
Health Care and Social Assistance	73	11%
Arts, Entertainment, and Recreation	7	1%
Accommodation and Food Services	7	1%
Public Administration	13	2%
Other Services	6	1%
Total	673	100%

Revenue

\$100 million to \$249 million	53	8%
\$250 million to \$499 million	61	9%
\$500 million to \$999 million	102	15%
\$1 billion to \$4.9 billion	174	26%
\$5 billion to \$9.9 billion	65	10%
\$10 billion to \$30 billion	148	22%
\$30 billion or more	70	10%
TOTAL	673	100%

Notes

- ¹ “Case Study: AstraZeneca,” InnoCentive, September 2019, <https://www.innocentive.com/wp-content/uploads/2019/09/astrazeneca-case-study.pdf>.
- ² “Businesses Will Spend Nearly \$1.2 Trillion on Digital Transformation This Year as They Seek an Edge in the Digital Economy, According to a New IDC Spending Guide,” International Data Corporation, April 24, 2019, <https://www.idc.com/getdoc.jsp?containerId=prUS45027419>; “Worldwide Spending on Digital Transformation Will Reach \$2.3 Trillion in 2023, More Than Half of All ICT Spending, According to a New IDC Spending Guide,” International Data Corporation, October 28, 2019, <https://www.idc.com/getdoc.jsp?containerId=prUS45612419>.
- ³ “Older People Projected to Outnumber Children for First Time in U.S. History,” news release, March 13, 2018, <https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html> (Accessed June 2020).
- ⁴ Paul Taylor, Kim Parker, Eileen Patten, and Seth Motel, *The Sandwich Generation: Rising Financial Burdens for Middle-Aged Americans*, Washington, D.C.: Pew Research Center, 2013, <http://www.pewsocialtrends.org/2013/01/30/the-sandwich-generation>, http://www.pewresearch.org/wp-content/uploads/sites/3/2013/01/Sandwich_Generation_Report_FINAL_1-29.pdf (Accessed June 2020), p. 1.
- ⁵ Joseph B. Fuller and Manjari Raman, (January 2019). *The Caring Company*. Published by Harvard Business School.
- ⁶ Hironao Okahana and Enyu Zhou, *Graduate Enrollment and Degrees: 2008 to 2018*. Washington, D.C.: Council of Graduate Schools, October 2019. https://cgsnet.org/ckfinder/userfiles/files/CGS_GED18_Report_web.pdf (Accessed June 2020).
- ⁷ Kim Parker, Juliana Menasce Horowitz, and Molly Rohal, “Parenting in America,” Pew Research Center, December 17, 2015 <http://www.pewsocialtrends.org/2015/12/17/1-the-american-family-today/> (Accessed June 2020).
- ⁸ U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement, Living Arrangements of Children Under 18 Years and Marital Status of Parents, by Age, Sex, Race, and Hispanic Origin and Selected Characteristics of the Child for All Children: 2018, Raw Data (Washington, D.C.: U.S. Census Bureau, 2018). <https://www.census.gov/data/tables/2018/demo/families/cps-2018.html> (Accessed June 2020).
- ⁹ “Schedule SE/C Tax Returns,” Gig Economy Data Hub, <https://www.gigeconomydata.org/research/data-sources/schedule-sec-tax-returns> (Accessed November 2020); “Freelancing in America 2019,” Edelman Intelligence, <https://www.upwork.com/i/freelancing-in-america> (Accessed November 2020).
- ¹⁰ Joseph B. Fuller, Judith K. Wallenstein, Manjari Raman, and Alice de Chalendar, (May 2019). *Future Positive*. Published by BCG, Harvard Business School.
- ¹¹ Michael Tushman, Hila Lifshitz-Assaf, and Kerry Herman, “Houston We Have a Problem: NASA and Open Innovation,” Harvard Business School Case 9-414-044, Revised November 12, 2014.
- ¹² William R. Kerr, Emilie Billaud, and Mette Fuglsang-Hortshoej, “Unilever’s Response to the Future of Work,” Harvard Business School Case N1-820-104, April 7, 2020.
- ¹³ Joseph B. Fuller and Emer Moloney, “Shell: A Company of Opportunity,” Harvard Business School Case. 9-320-025, September 12, 2019.
- ¹⁴ William R. Kerr, Emilie Billaud, and Mette Fuglsang-Hortshoej, “Unilever’s Response to the Future of Work,” HBS N1-820-104, April 7, 2020.
- ¹⁵ Joseph B. Fuller and Emer Moloney, “Shell: A Company of Opportunity,” Harvard Business School Case 9-320-025, September 12, 2019.
- ¹⁶ William R. Kerr, Emilie Billaud, and Mette Fuglsang-Hortshoej, “Unilever’s Response to the Future of Work,” Harvard Business School Case N1-820-104, April 7, 2020.
- ¹⁷ Joseph B. Fuller and Emer Moloney, “Shell: A Company of Opportunity,” Harvard Business School Case. 9-320-025, September 12, 2019.
- ¹⁸ Joseph B. Fuller and Emer Moloney, “Shell: A Company of Opportunity,” Harvard Business School Case 9-320-025, September 12, 2019.
- ¹⁹ William R. Kerr, Emilie Billaud, and Mette Fuglsang-Hortshoej, “Unilever’s Response to the Future of Work,” Harvard Business School Case N1-820-104, April 7, 2020.
- ²⁰ William R. Kerr, Emilie Billaud, and Mette Fuglsang-Hortshoej, “Unilever’s Response to the Future of Work,” Harvard Business School Case N1-820-104, April 7, 2020.

